

What is claimed is:

1. An azeotropic composition consisting essentially of 1,2-dichloro-3,3,3-trifluoropropene and hydrogen fluoride.

2. An azeotropic or azeotrope-like composition consisting essentially of from about 1 to about 90 weight percent hydrogen fluoride and from about 10 to about 99 weight percent 1,2-dichloro-3,3,3-trifluoropropene, which composition has a boiling point of from about 26°C to about 68°C at a pressure of from about 23 psia to about 84 psia.

3. The composition of claim 2 which consists of hydrogen fluoride and 1,2-dichloro-3,3,3-trifluoropropene.

4. The composition of claim 2 wherein the hydrogen fluoride is present in an amount of from about 10 to about 80 weight percent.

5. The composition of claim 2 wherein the hydrogen fluoride is present in an amount of from about 40 to about 60 weight percent.

6. The composition of claim 2 having a boiling point of about 26°C at a pressure of about 24 psia.

7. The composition of claim 2 having a boiling point of about 45°C at a pressure of about 42 psia.

8. A method of forming an azeotropic or azeotrope-like composition which method consists essentially of blending from about 1 to about 90 weight percent hydrogen fluoride and from about 10 to about 99 weight percent 1,2-dichloro-3,3,3-trifluoropropene, which composition has a boiling point of from about 26°C to about 68°C at a pressure of from about 23 psia to about 84 psia.

9. The method of claim 8 wherein the composition consists of hydrogen fluoride and 1,2-dichloro-3,3,3-trifluoropropene.

10. The method of claim 8 wherein the hydrogen fluoride is present in an amount of
5 from about 10 to about 80 weight percent.

11. The method of claim 8 wherein the hydrogen fluoride is present in an amount of from about 40 to about 60 weight percent.

12. The method of claim 8 wherein the composition has a boiling point of from about 26°C at a pressure of about 24 psia.

13. The method of claim 8 wherein the composition has a boiling point of from about 45°C at a pressure of about 42 psia.

14. A process for removing 1,2-dichloro-3,3,3-trifluoropropene from a mixture of 1,2-dichloro-3,3,3-trifluoropropene and at least one impurity, which process comprises adding hydrogen fluoride to the mixture in an amount sufficient to form an azeotropic or azeotrope-like composition of the 1,2-dichloro-3,3,3-trifluoropropene and the
20 hydrogen fluoride, and thereafter separating the azeotropic composition from the impurity.

15. The process of claim 14 wherein the impurity does not form a close-boiling azeotropic mixture with 1,2-dichloro-3,3,3-trifluoropropene, hydrogen fluoride or a
25 mixture of 1,2-dichloro-3,3,3-trifluoropropene and hydrogen fluoride.

16. The process of claim 14 wherein the impurity comprises a halocarbon.

17. The process of claim 14 wherein the impurity is miscible with 1,2-dichloro-3,3,3-trifluoropropene.
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18. The process of claim 14 wherein the impurity is 1,1,1,3,3-pentachloropropane.

19. The process of claim 14 wherein the separating is conducted by distillation.

5 20. The process of claim 14 wherein the azeotropic composition consists essentially of from about 1 to about 90 weight percent hydrogen fluoride and from about 10 to about 99 weight percent 1,2-dichloro-3,3,3-trifluoropropene.

10 21. The process of claim 14 wherein the azeotropic composition consists essentially of from about 10 to about 80 weight percent hydrogen fluoride.

22. The process of claim 14 wherein the azeotropic composition consists essentially of from about 40 to about 60 weight percent hydrogen fluoride.